Interview with RADM Donald L. Sturtz, MC, USN (Ret.). Dr. Sturtz has been a naval aviator and naval medical officer; served in Vietnam; and was the commanding officer of USNS *Mercy*; the Atlantic Fleet Surgeon, and a Professor of Clinical Surgery at the Uniformed Services University of the Health Sciences, Bethesda, MD. Conducted by Jan K. Herman, BUMED Historian, Bethesda, MD, 11/7/1991, 11/27/1991, 12/3/1991.

Did you join the Navy with the idea that you wanted to be a Naval aviator?

I did. I was about 16 or 17 years old and had the idea that I wanted to join the Navy. My parents had given me a book called *Navy Blue and Gold* when I was about 14 years old. I read that, and it sounded like an exciting adventure. I grew up in Ohio, a long way from the water. Having read this book, it stimulated me to think that I would like to go to that school. I applied to the Naval Academy and entered the Navy through that route.

When you went through Annapolis, did you specialize in engineering as most people did then? I think the academic program strongly emphasized the engineering side.

Your memory is correct about that. We had no choices except for foreign language. Otherwise, it was basically marine engineering and electrical engineering and during that period of time, the goal I had to become an aviator stayed with me.

There was a jet seaplane on the drawing boards in the early 1950s and that caught my imagination also. I thought, "I would like to do that." Well that didn't turn out to work very well at all. There were a few models built by a company in Baltimore, but they found they had a problem with salt water corrosion in the turbine blades. The plane quickly dropped out of the picture, but my interest in aviation didn't.

Where were you assigned after you left the Naval Academy?

I was sent to a destroyer out of Pearl Harbor. Hawaii was still a territory then. It was 1955 and the assignment was by choice. Many of my classmates from the Naval Academy went from graduation to Pensacola and into their flight training. But having just completed those 4 years in the classroom, I was ready to take a little time away from the books and study, and see what it was like to go to sea. By choice, I went to sea aboard destroyers for 1 year before reporting back for flight training.

Then you went to Pensacola after that?

Yes, in the fall of 1956.

What type of aircraft did you fly there?

I went through basic training in Pensacola and did my first carrier qualifications in a propeller type aircraft out of a little airfield in southern Alabama. We flew from a place I believe was called Bruton Field. After leaving basic training, I went to Kingsville, TX, for advanced training and flew aircraft like the F9F5 Panther, the F9F6 Cougar, and another aircraft the Navy

called the TV at that time, a single engine jet aircraft. Upon completion of advanced flight training, I went to Naval Photographic Reconnaissance School in Pensacola. That was a side track for a few months in my career. There were 11 of us in that class and it was a wonderful school. We started out with Brownie cameras and ended up flying F9F6s with very good cameras in them. We mapped the countryside in southern Alabama. I really enjoyed the work in photography, but out of the 11 of us in that class, only two went to photo reconnaissance squadrons. The other nine went to a variety of things and I happened to get sent to a replacement air group squadron, VA-44, in Jacksonville, FL, for a new aircraft called the A-4D. I was thrilled about that because it was a wonderful airplane.

How long were you in Jacksonville?

Not long. We learned to fly that airplane and went through a course there. I would guess it was only 4 to 6 months. When I finished that, I received orders to squadron VA-83. Its homeport was Oceana Naval Air Station in Virginia Beach, VA. At the time I received orders to the squadron, it was deployed and I joined the squadron in Rio de Janeiro. They were coming back from a cruise. They came from the southern tip of Africa over to South America and I met them there. But I would like to backtrack to tell you something about VA-44 and learning to fly that aircraft.

Things obviously were different in the mid-1950s as compared to today when there are many simulators and flight trainers. I may be exaggerating a little, but my memory of flying the A-4 was that we went to a classroom. They told us about the plane, gave us a handbook to read, and we took a written test on it. A day or two later we got in the airplane and flew it. That's just the way it worked then. There were no two-seaters. There were no trainers, and there was no simulator. There was no Link trainer or anything like that. They said, "This is the landing speed and this is how you do it," and we did it.

Somewhere along the line you had carrier landings didn't you?

Yes. I had mentioned that in basic training I flew an aircraft called the T-28 on board a training carrier in the Gulf of Mexico. Eventually I did my A-4D carrier qualifications off Guantanamo Bay, Cuba in the fall or winter of 1958. I would have to look into my log book to verify that, but my carrier qualifications were done aboard the *Franklin D. Roosevelt* and I have good memories of that time.

What are your reminiscences of your first carrier landing besides being petrified?

You know, that is a good way to describe it. I remember very well the first carrier landing in the T-28 in the summer of 1957. I got up about 4 o'clock in the morning to drive out to the airfield in southern Alabama where we were going to be briefed, pre-flight the aircraft, take off, and go out a short distance into the Gulf. I was a young LTJG at the time and the thought actually went through my mind, "I may not survive this day;" it was interesting in another aspect. The training was extremely thorough and very good. The American taxpayers provided the best equipment and we practiced on the field for at least 100 field carrier landing practices before we went out to the ship. We had the same landing signal officer out on the ship that we had on the beach. He critiqued our landings at that time. I was number two in the pattern. There was one

student pilot ahead of me to make the landing. He happened to be a foreign exchange student from Germany. He was a minute and several miles ahead of me in this pattern. As he began his landing, I began my turn to come in behind him, number two in the pattern, when he flew into the water. It was a bit unnerving to see this airplane go "splash" into the Gulf of Mexico. The story has a happy ending. He survived. He was pulled out of the water, but it didn't do anything for my confidence to be number two coming behind this fellow.

But let me tell you about those first landings. You first do what are called touch and go's. You do not put your tailhook down. When you hit the deck, you go to full power and take right off again. I remember doing this once or twice before the LSO said, "Alright, you seem to be steady enough. Put your tailhook down and we'll catch you." After a certain number of traps, as they called them, and take offs, they sent us back to the beach. I flew back and was very relieved to have survived all of this. I had a great feeling of accomplishment and was almost euphoric you would say. I was turning in some of my equipment at the field and was getting ready to have the officer of the day sign my papers and check out. I was through with basic training. There was a speaker system in this hanger and my name was announced. "LT Sturtz, report to such and such an office." I couldn't imagine why I was being called there. So, I went and there was a maintenance officer waiting to talk to me. The aircraft had gauges in them that recorded how many Gs you sustained when you landed because the planes could only take so much stress. It's well known what that stress is; they're designed that way. It seems that I had over stressed the wings on the aircraft. I had hit the deck so hard on one of those landings that the meter recorded a high G level. He called me in to talk to me about it and my heart began to sink. I thought, "Am I going to fail? Am I not going to be qualified?" It turned out that I wasn't too far over the limit and all he said was, "You must have had a hard landing. You watch that as you go on in your training," and that's all there was to it.

Where were you assigned after that?

In 1958 I joined VA-83 in Rio de Janeiro. That was aboard the aircraft carrier Essex, a straight-deck carrier at that time with a wooden deck, which was also interesting. We had a mirror landing system although we relied on the landing signal officer as much as the mirror at that time. I stayed with VA-83, which was a very fine squadron, became a part of carrier Air Group Eight and then deployed to the Mediterranean aboard the *Forrestal* with that squadron. My memories of that squadron are very good also. We won the Safety Award for the Atlantic Fleet in Naval aviation squadrons in the summer of 1960.

Even though I liked the Navy and enjoyed what I was doing, I wanted to go to medical school. It was an interest that I'd had for many years.

That idea didn't just come on suddenly then?

No.

You had this twin interest, really, in aviation and medicine.

Exactly.

Had you ever thought, even before you went for your flight training, that someday

you wanted to be a physician?

I can even go back before the training. I had the idea of becoming a physician when I was in my teenage years. Along with an interest in the Navy was an interest in medicine. That came about because I had a younger brother who was seriously ill when we were small boys. I remember the doctor making house calls and coming to our home in Coshocton, Ohio, where I grew up. I had a good feeling about what this doctor did for my brother. Later in my life my mother became seriously ill and another kindly physician took care of her. I was impressed by both those men who cared for my family. But, even though I had the interest, I was one of four sons in a low income family and it didn't appear that there would be any way that my father could send me to college, let alone medical school. In fact, that's one reason I became interested in the Naval Academy. It was a way to get an education on a scholarship you might say. My dad wouldn't have to pay any tuition and so forth. The interest in medicine was coincident with the interest in the Navy.

After completing flight training and flying for about 4 1/2 years, this interest in medicine kept coming back. As a matter of fact, there was a surgeon on the Forrestal. We had time to talk occasionally and he encouraged me and stimulated my interest. I said, "You know, there was a time when I thought I might want to go into medicine." He said, "Well, it isn't too late you know," and the conversation took that course. Eventually I discussed it with my wife and made the decision. At the time I graduated from the Naval Academy, a graduate had an obligation of 4 years. I stayed 5 years and 9 months before resigning to go to medical school, because I did like the Navy and what I was doing. It's just that this interest kept coming back in medicine. When my wife and I, together, decided that we would try to accomplish going to medical school, I asked my commanding officer and higher authority if I could take a leave of absence with no pay but remain on the Navy rolls. My memory is a little vague about what was said in 1960. But, the bottom line was there were no scholarships and there was no way to go on leave without pay. The answer was "No," to my question. So, I resigned and went to medical school as a civilian.

Where did you go?

To the University of Pennsylvania in Philadelphia. I graduated from there in 1965.

Was there any time during medical school that you thought about rejoining the Navy as a physician?

You hit the nail right on the head. Some time around 1963 a program called the Ensign 1915 Program came into being. If you obligated yourself to a few years in the Navy during your senior year in medical school, you would be paid $100 dollars a month, which seemed like a lot of money to me in 1964 and 1965. And it was. So, I rejoined the Navy as a Medical Corps ensign in the reserves. I had left active duty as a lieutenant in the line and came back some time in April or May of 1963. I was a scholarship student in my senior year, getting $100 dollars a month until I graduated in 1965.

Were you on active duty after that?

I was. I went to do my internship at Philadelphia Naval Hospital. I had visited the hospital as an extern when I was a medical student at the University of Pennsylvania and had a very good

impression of the hospital. I was an intern in July 1965. The hospital was a good place to work. It was affiliated with all five of the medical schools in Philadelphia and it was becoming busier and busier with returning casualties from Vietnam. When I was near the completion of my internship, I had decided I wanted to go into orthopedic surgery. The policy at that time, as it is now, was you go to sea for a year or two before you go into your training and that was acceptable to me. I knew what I had signed up for and I had orders to a ship. It turned out that the general surgery program had an unexpected vacancy and the chief of surgery of Philadelphia was Dr. Donald Custis who eventually became Surgeon General of the Navy, as you well know. He gave me a call in late June of 1966 and said, "Don, I know you're interested in orthopedics but I have an opening in general surgery. Would you be interested?" My answer was, "I enjoy general surgery very much. Let me discuss it with my wife since this is quite a big change in our plans and may I get back to you after the end of the weekend?" He said, "Of course." I discussed it with my wife and we decided that would be a good thing to do. We liked Philadelphia, had two small children, and thought it would be nice to stay with them there. That is how I entered the general surgery training program at Philadelphia Naval Hospital. And as I said, each year the hospital kept getting busier and busier with hundreds and hundreds of patients coming from Vietnam. I became a third-year resident in 1968 when things were very active in Vietnam. I had an interest in going there for part of my training, so I approached Dr. Custis and said, "Do you think we could arrange for me to go over for a 3-month block of time to work either on the hospital ship or at Da Nang and get experience in combat casualty care?" He encouraged me and was very helpful. He contacted the appropriate officials, I think it was the American Board of Surgery and said, "Could we count this time? Would it be agreeable to you?" Their answer was yes, as long as I was supervised and there were qualified surgeons teaching me. That's how I made it to Vietnam as a resident.

That was '68?

Correct. It was July through September 1968.

You were assigned to the hospital ship *Sanctuary* for that time?

It was a very loosely organized assignment. I was sent with TAD orders for 3 months and was more or less on my own at my initiative to acquire this training that I had asked for.

It sounds like a great deal.

It really was. I remember arriving in Saigon aboard a MAC [Military Airlift Command] flight and seeing fires in the countryside around Saigon. Some of them were set by explosions and artillery shells and I could see the smoke rising. I remember several things very well, how the pilot descended quickly to get into Tan Son Nhut airport in Saigon because there was some concern that flying low over the surrounding countryside, someone might take a pot shot at the aircraft. Upon landing, there was no greeting committee saying, "Hey, here comes Dr. Sturtz. Welcome." I was just one of hundreds of people who were milling about confused in that country during the war. I asked someone how to get to Da Nang. They said, "There's a military police officer over there here in the corner of this hanger. Go ask him." I did and he said, "We have C-130s and other aircraft coming through here unscheduled but frequently. We're sure we can

get you on board one and get you up to NSA [Naval Support Activity] Da Nang." It didn't seem as though I had to wait long, a few hours maybe. Sure enough, here came an airplane. I think it was a C-130 and I was told I could go out and get on board. I did, entering by a rear ramp. There were all kinds of people in there--not just military but also civilians. That is another vivid memory. There was a lady sitting on one of the canvas strap seats with a live chicken in some sort of little cage. Here I was in this airplane taking off for Da Nang with people I didn't know. Once again, I recall that there was a lot of vegetation but as I looked out I could see fires and smoke rising here and there. I didn't know if it was from cooking fires in villages or from things that had been set on fire from artillery shells. It was just all kind of a confusing picture to me, but, within a short time--an hour or an hour and a half--we landed at Da Nang. Once again, I asked someone where the hospital was and they said, "If you wait here, there's a bus that goes from the airport out to the hospital. You can catch a ride." That's what I did.

I arrived at the hospital at Da Nang in early July 1968. It was very hot and just about sunset and getting dark. I walked into the hospital entrance area near where triage was and one of the first people I saw was an anesthesiologist by the name of Al Birtch, who had been staff anesthesiologist at Philadelphia Naval Hospital before he had gone to Vietnam. It was a familiar face and I was very happy to see a friendly person. Another memory that comes back very clearly. As we were standing outside on a sidewalk passageway with an overhead roof, he got an unusual expression on his face and suddenly gave me a shove. He jumped into a drainage ditch beside the sidewalk and pulled me down with him. I heard this "whoosh poomp." There was a mortar or rocket attack going on. It happened so fast that I wasn't actually scared. There were only two or three rounds. It was probably a couple of Vietcong out in a nearby field you could see from the back of the hospital. There was a little marine landing strip several hundred yards across a road from where the hospital was. I came to learn that every once in awhile the Vietcong would come in close enough to the hospital compound to lob a few mortar rounds over toward this airstrip. You could hear the sounds of the mortars and you could hear the explosions. Although it didn't happen while I was there, occasionally some of those mortars fell short and actually hit the hospital. There were patients in wards who were injured a second time by mortar rounds in Da Nang in 1968.

This was all happening in the same day. You had just arrived in Vietnam. The culture shock must have been just incredible. Seeing the chicken on the plane would have been enough.

Well, it was. It was a strange country, a strange language, there was a war going on, I was tired and I'd been traveling for 36 or 48 hours, pretty much without any sleep. The other funny memory was that I just kept eating breakfast as I crossed the Pacific. As we crossed time zones we ate scrabbled eggs one meal after another.

When you finally got up the next day after resting a bit, what did you do? Did you go see the CO and say "Here I am at your service."

Exactly right, that's how it was. The chief of surgery there was a Navy captain named Vern Fitchett. He said, "We're happy to have you here, we need you, we can use you, we're busy. You'll be the first assistant as often as you want. You'll be on permanent first call. We're always

going to turn to you and say, "Hey, we've got a case. Do you want to be involved?" That pleased me a great deal because that was exactly the reason I went there. In no time at all, I was given a tour of where things were--the triage area, radiology, the operating room preparation area, the ORs, intensive care, recovery--all of that. And they put me into the schedule and I started operating within a matter of hours that next day.

Do you recall your first patient?

I could pull out my records and tell you the first patient. Just sitting here talking, I can't recall specifically. But, the patients would come in, sometimes in large numbers from just a very short distance away. The fighting was going on all around Da Nang. Occasionally it would be a matter of only 5 to 8 minutes between the time a patient was wounded out in the fields, or rice paddies, or river banks close to the hospital until they would arrive by helicopter, at Da Nang hospital. They would arrive sometimes in groups of 20 or 30 or 40 patients at a time. My memories of the hospital are very good memories as far as the medical treatment is concerned. I used to think that if you were to be injured, that was probably one of the best hospitals that you could ever go to at that time. Because, day after day, they took care of dozens of patients with serious wounds--penetrating injuries, blunt and blast injuries--and the setup was very efficient. Patients would be brought by helicopter to a helicopter landing pad. Beside the pad, separated by a wooden fence, was the triage area. It was an enclosed area in which there were about 12 to 20 spaces for patients. When I say spaces, there were saw horses on a cement deck and patients could be brought in on stretchers and just laid on those saw horses. The IV fluids were already hung and ready prior to any patient arriving. There were corpsmen there with scissors to cut clothing off patients because immediately we undressed them to see where the injuries were that might have been hidden by the clothing. There was fresh water to clean the grime and dirt of the rice paddy and battlefield grime and dirt off the patients as well as all the things you needed to resuscitate a patient. We had endotracheal tubes, tracheotomy tubes, chest tubes, Foley catheters--everything was there.

Another thing I think people need to know now about that triage is that the corpsmen could put in chest tubes and could intubate. They worked in those surroundings day in, day out. They were the only ones available, when 30 or 40 patients would come in at once and several would be under respiratory distress and the ORs would be full. There weren't enough doctors to go around and if a corpsmen had been trained and supervised and had been passed on his skills, he could put in a chest tube or he could do an intubation and he did and saved lives. I haven't seen a situation where it was necessary, but it was done then and it was a good thing.

Did many of them learn on the job, watching the physicians and having the physicians train them in the spare moments?

That was exactly how it happened. It wasn't planned.

It didn't happen at the field medical school or anything like that?

No, it was the way you described it. It was out of necessity, on-the-job. In those circumstances, if they hadn't done what they did, a patient might not have survived.

In addition to the room where triage was done, there was an adjacent open area which

was also used for triage when there was an overflow. When the room that had these 12 to 20 spaces filled up, like it did occasionally, we would spill over into this. It was just like a patio with a concrete deck. It had a roof over it, but there were essentially no walls. The setup was the same with saw horses, IVs, and all of the other equipment. Once in a while, we had both areas going when all the spaces were being used because of the number of patients who were injured.

From triage, those patients who needed it could be moved into X-ray. I recall that if a patient came in with multiple shrapnel wounds having had stepped on a mine or booby trap, often he would be bleeding from head to toe with cuts and lacerations. In these cases we would order, for the sake of efficiency, "total body X-rays." That's what would be printed on the X-ray slip. That patient would go to X-ray. It was known by this time in the war, that "total body X-rays" meant 37 different views. They started with the skull and progressed down the body--several different skull films, surgical spine films, all extremities, the chest and the abdomen. The impressive part about it was even back in 1968, with all the confusion and with all of the patients moving through there, the doctor, who ordered those films, could usually see the first film coming out of the developer soon after it had been ordered. We were able to put that initial film on the view box in about 12 minutes. As you were reading the X-rays, more just kept coming, and you kept looking, and evaluating and diagnosing.

The films were then coming as fast as you could study them anyway.

That's exactly the point. I was always impressed with the radiology technicians and the radiologists who were able to do that because even today there are many instances where you want an X-ray and you won't see the first one for 12 minutes. That may not be a fair comparison but I was impressed with how they did it then.

From radiology, the patients moved into a pre-op hold area. where they were prepped, cleaned of their battle injuries as much as possible, scrubbed, and shaved. There were many very dramatic or grotesquely injured patients who came through. I have no pictures to show of those patients. There was just something about being a young surgical resident put into that situation. I was deeply bothered by the mutilation. It's a little difficult to describe, but the point is I didn't take any pictures. I can remember them all. Even though I have no slides, I can picture them in my mind. I took pictures of the hospital, the surrounding countryside, many things, but never of patients. When I say some of the injuries were grotesque, I remember one patient walking in with a piece of metal protruding from his left shoulder posteriorly. As the metal entered the skin, it had cauterized the wound itself from the heat. He came through triage with this chunk of steel projecting from his shoulder. It wasn't a life-threatening wound as it turned out. It was rather deep, but he didn't even have a pneumothorax. I also remember patients coming in with traumatic amputations; sometimes both lower extremities were missing as a result of stepping on a land mine. I remember patients coming in with their wounds still smoldering because white phosphorus was under the skin and it was still burning. We had to debride the wound, irrigate it, and wash it out.

I got off track there a little bit, but what I was saying was that patients would come into the pre-op hold area and then as soon as an operating room opened, in order of priority, according to how life threatening their wounds were, they went into that operating room. Frequently, there would be two or three surgeons working on the same patient. One surgeon would be inside the

abdomen. There would be an orthopedic doctor working on one or several of the extremities debriding wounds, and there might be a neurosurgeon at the head of the table doing a procedure. We worked as a team and we operated until everybody was taken care of on any given day or night.

I've heard that when the hospital at Da Nang was inundated with casualties they would sometimes contact one of the hospital ships to see if they could take some of the patients off their hands. And sometimes it worked vice versa when a hospital ship might get inundated with casualties. Did you ever see that situation?

I can't give you a quantitative answer but it did happen although not frequently. We had about 12 or 14 surgeons at Da Nang when I was there. This included specialists like neurosurgeons. We also had a urologist and a thoracic surgeon. The rest were general surgeons. Sometimes there were occasions when both places were busy--the hospital and the ship--or just the ship was full. That is when triage comes into affect. You delay some patients' care if it's necessary. I know that always offends some people when they hear it the first time. Even the word triage bothers them--that you sort and separate and so forth. The concept is truly humanitarian and it's doing the greatest good for the greatest number when your resources are overwhelmed. I am happy to say in my personal experience I am not aware of anyone dying because we went through that sorting process. Even though some patients occasionally did have to wait an hour or two or three, they were all eventually taken care of. Once again, as I said, I have no personal knowledge of anyone not surviving because of the triage process.

When you first arrived and were thrown into a situation handling large numbers of combat casualties, do you recall feeling like a greenhorn? Did it take long to really feel comfortable?

Your question is very perceptive and I can't tell you an exact number of days except that I recall it was a remarkably short period of time. For one thing, I felt that my training under Dr. Custis at Philadelphia Naval Hospital was excellent and secondly we had been receiving many patients there for the 2 years before I went to Vietnam. So, I knew that contaminated wounds in the field were left opened. I knew the principle was that you had to debride these wounds. You had tissue that was devitalized and there were fragments, rice paddy material, and clothing in these wounds which had to be cleaned or infection would set in. I knew that if you had to open the abdomen and repair a bowel, you did a colostomy but you didn't do an anastomosis on the battlefield under those contaminated conditions with the patient frequently coming in from the field and having just eaten and having been wounded and so forth. So, I knew the principles. Even after getting there and getting thrown right into the OR within hours of arriving after one night's sleep, I became familiar with how things were done. I learned the way surgeons who had been there for a year were doing it. They were very firm and rather dogmatic in saying, "Listen, this is how you do it. This is what's best for the patient." I believed them. They were the most experienced trauma surgeons around at that time in the Navy and it didn't take me long at all. As a matter of fact, because I felt comfortable and because I wanted to learn, it wasn't too many days until the chief of surgery let me be the primary surgeon. There was always someone outside the door or a few steps away or coming in to check and look over my shoulder and observe how I

was doing or ask me questions about what I was doing. I felt that I was given appropriate responsibility and did not feel uncomfortable or that I had been thrown into something where I was over my head.

Did you find that the type of surgery practiced there at Da Nang meshed well with the training you had received at Philadelphia under Dr. Custis? Was it difficult to accommodate yourself to that new reality?

They meshed very well. There was no new concept that I learned. It had all been taught at Philadelphia. I mentioned that the Naval Hospital was affiliated with many medical schools and with well known surgeons. The chief of surgery at my medical school was Isidor Ravdin, who had been a consultant and a general in the Army during World War II. I had heard the concepts. I had a good background. The thing that was overwhelming there at Da Nang were the numbers of young people with terrible injuries.

That's what was really different because you hadn't seen that in Philadelphia.

They were healing by the time I saw them. The wounds were dressed. When I saw them in Philadelphia, I was seeing patients who generally were not in pain. I was able to review a chart and it was more clinical. I was able to see studies. I was able to look at X-rays. Although some of them were in pain and the injuries were terrible, still I was seeing them a week or two or three or four after they were injured.

In Da Nang, I saw them 5 to 8 minutes after they had been injured. They were in shock emotionally as well as from hypoxemia; clinically their blood pressure was low. They were hurt, confused, crying; they had seen their friends killed around them. It was much more dramatic. It had much more impact.

You mentioned Dr. Ravdin. He was a real giant in the field of surgery during World War II and his name keeps coming up in the literature from that period over and over again. Did you actually study with him?

Yes. I actually studied with him. I would have to go look at a history book or some other information to know his age at the time I was with him. He retired within a few years of my graduating from medical school. But, as a medical student at the University of Pennsylvania, I would get up early in the morning and accompany his team on rounds. I can tell you two memories from that time. I would guess he was in his 60s, I don't know whether mid or late. But, here are my two memories: one is that at that time he himself was taking an anticoagulant. We would stop along the way at a nurses' station. He would roll up his sleeve and one of his residents would draw blood from him to do his bleeding time. Another memory I have of him was that he was beloved by most of his patients because he was a warm, good, intelligent, wonderful surgeon for them. The thing that made me smile was that we would have many patients to see early in the morning and we'd be going from room to room. We would enter a room and he would pull the chair up beside the patient's bed and he would usually touch them in some way or another, which I think they always appreciated. He would pull out a cigarette and light it. He might only take one puff on it, wish the patient well and we would leave the room and go to the next patient. Frequently, in the next patient's room he'd pull out another cigarette, light it and take a few puffs

and again we would leave. He actually smiled and passed on the wisdom that if you sat down, made contact with the patient, and if they saw you light a cigarette, the impression was that the doctor had spent quite a bit of time with them. Dr. Ravdin had a lot of patients to see and that was a way to make each of them feel very special and that each really got a significant amount of his time. This all sounds a little cynical and I don't mean it that way because my memories of him are that he was a wonderful man. I looked up to him. Here was this surgeon who was well thought of, who wrote textbooks, who did good things.

I want to ask you some more about Da Nang. Did you ever manage to get off the post there at NSA and wander about the countryside?

Yes, but not to any great extent. There were two mountains there near NSA Da Nang, Monkey Mountain and Marble Mountain. It used to be said that we owned Marble Mountain during the day and the Vietcong owned it during the night. We're talking about just within a mile or two of the hospital. People didn't generally just walk around because there was the danger of being hurt. But, yes. I did get off base, I think twice, in the time I was there.

Once, I went to a beach and swam. I had lost about 20 pounds in a matter of a few weeks and you can see it in those slides I brought back. I'm just a very skinny guy standing there in the sand and surf. I think we worked very hard for a number of days and the chief of surgery said, "Why don't you get down to the beach this afternoon and just sunbathe a little and swim a little." That sounded like a good idea and I did it.

I've heard people say that this was the great irony. Here were these absolutely gorgeous beaches and just a few miles away people were being slaughtered.

Well, it's true.

How long did you work at NSA Da Nang before you were able to get aboard *Sanctuary*?

The time was divided at just about half and half: 6 weeks at Da Nang then 6 weeks on the *Sanctuary*. I can't tell you why I did it that way. I just thought, "I've been here 3 months I would like about half the time on the shore at the hospital and half the time on the ship. I want to get an equal experience both places," was my thinking. Sometime in mid-August 1968 I left Da Nang and went to the hospital ship. I wasn't disappointed in either place in any way. It was a fine learning experience in both places. It was a little odd being on the ship after having been ashore the first 5 to 6 weeks. The shore was hot with the outside temperature sometimes over 115 degrees. We lived in quonset huts, and the hospital itself was on sandy soil. It was very dusty. It was always noisy. There were always helicopters coming in and often in the distance you could hear the "whump, whump, whump" of artillery shells and bombs. At night, you could see the flashes of artillery shells and explosions a few miles away.

But, then I went to the ship. It was clean and much quieter. It was air conditioned and if you weren't operating, you could go to a nice wardroom and get a good meal. It was just such a contrast.

The patients came by helicopter and they were just as seriously injured. The numbers were less coming to the ship than to the shore because the ship only had three operating rooms

while at Da Nang I think we had seven or eight. You know, it's funny I can't remember that number right now. But, it was more than twice what we had on the ship. We had a higher volume of patients ashore but the severity of the injuries was the same. The patients were the same. They came with traumatic amputations and so forth. If there were no patients coming at the time, the ship was a haven. It was peaceful. It was on those blue waters and from a few miles out at sea, you couldn't see some of the ugliness. All you could see were the green trees and the hillsides, the blue waters, the blue sky, the white clouds, and the sunshine. It was almost a different world even though it was just a few miles away.

How did you get aboard?

The ship would come into the harbor at Da Nang about once a week or every 10 days to off-load patients and pick up supplies. I remember riding a launch out to the ship. It was a beautiful day when I went aboard although it was rather warm. The sky was clear and the sun was shining. As we approached the *Sanctuary*, I was impressed with the whiteness of the ship. To me it was beautiful from a distance seeing the big red crosses on the side. Realizing that it was a hospital offshore in Vietnam, my impressions were very positive and very good the first time I ever saw it.

Then you were stationed out there a full 6 weeks. The USS *Sanctuary* and the USS *Repose* more or less spelled each other.

That's right. When one would come into the harbor to off-load patients and bring on supplies, the other would be up off the coastline wherever the fighting was most active and where there were the most casualties, which usually wasn't too far away. It was just a few hours sailing time.

Could you describe your welcome aboard the ship?

Well, they were well organized. They were used to having people come aboard. They were used to having visitors because of the personnel ashore in Vietnam, if they could find a way to get to the ship, liked to get out there. It was a little piece of America really. It was very clean and well kept. Meals were served at regular hours and the food was very good. When I arrived aboard, very quickly I was checked in and assigned to a supervising surgeon. I was given a room which to my memory was below the water line and when the lights were out it was extremely dark. There was no other illumination but the electric lights. It was adequate, comfortable, and a nice place to be assigned.

How soon thereafter did you get thrown into the action?

As was the case at Da Nang, I was in the OR the next day on *Sanctuary*. But, things on the ship were more controlled. There was less turmoil. It was not possible to receive the same number of casualties in such a short time as we had received ashore at Da Nang. Large helicopters could come into Da Nang, as I had mentioned to you before, with 20 or more seriously injured people at one time. Ordinarily, the helicopters that came out to the *Sanctuary* arrived after having called out and announced that they were coming with patients; usually it was just two or three or four at any one time. There wasn't as much confusion, but helicopters did

arrive every day.

It was the following day that I started to operate. In some respects, operating aboard the *Sanctuary* was similar to how it had been back in Philadelphia prior to my leaving. It was just controlled, clean, quite a contrast from the beach.

The quality of the instruments and everything was state-of-the-art. So, you recognized everything immediately. It wasn't a matter of having to practice a different kind of medicine.

Correct.

Were there any other differences?

At Da Nang, the great majority of the patients were trauma victims--gunshot wounds, multiple shrapnel wounds, and penetrating injuries from booby-traps. We did have a certain percentage of patients who showed up with routine things like appendicitis or a hernia that developed while they were ashore. Those kinds of patients were more often sent to the ship rather than kept ashore at Da Nang because they were very occupied with trauma patients there.

Did a great influx of patients normally coincide with a campaign going on ashore?

I can't say that. It was a rather steady flow. Occasionally, over a period of 6 or 8 hours, we might receive a dozen or more patients with serious injuries and the ORs would keep going for a day or 36 hours or something like that. There was definitely a different pace aboard the ship and ashore.

I recall Dr. Ben Eiseman [RADM, MC, USNR] telling me that while over there he occasionally had to help out. He was over there as a consultant but every so often he would be in a particular place where they needed every surgeon that they could get their hands on. He said that on one occasion they were overwhelmed. They immediately got on the radio and called the ship to see what was going on out there and they were able to take the overflow.

I think the system frequently worked that way. Ordinarily, if casualties occurred in the immediate area around Da Nang, that's where they went. They knew that the largest number of physicians were there. They knew they could depend on that facility because it had proven itself through many battles and skirmishes. I think the helicopter pilots, at least initially, also felt more comfortable landing ashore than they did coming out and landing on the small platform on the after end of the *Sanctuary*. Now, I'm speculating. If any helicopter pilot ever hears this, he may laugh at what I just said. But my experience was that we got fewer patients at the ship. We almost always knew 20 minutes or half hour ahead of time before they were going to get there because there was radio communication. Although we were always busy and I did miss many meals, I cannot remember being overwhelmed with patients the way I recall happening at Da Nang.

Then you knew the number of patients coming, the nature of their injuries, and could get everything out and ready to go before they hit the deck.

That's true. Although some of the time the triage was done by corpsmen ashore and it wasn't always accurate. Sometimes when we would undress the patient and do a complete examination, we would find injuries that hadn't been seen ashore. Most of the time, you're correct, we had an idea that it was a chest injury, or an abdominal injury, or an orthopedic injury that was coming in and we were able to set up and be prepared more than we had been able to do at Da Nang.

Did you see a real radical difference between what equipment was available at Da Nang as opposed to what was available on the ship?

Not at all. Da Nang cannot be taken as a typical example of what every surgeon experienced in Vietnam because there was an airfield and harbor nearby and, I think I may have mentioned this before, at Da Nang anything needed for a patient could be acquired within 24 hours from anywhere in the world. It was remarkable. I didn't really appreciate it at that time because I was too young in my surgical career. But, as I look back on it and as I had later experiences in the Navy, I came to realize how good the logistics system was there.

The same could be said for the *Sanctuary*. We truly lacked for nothing. If you had to be a trauma victim at that period in history, being a victim at Da Nang Naval Hospital was probably one of the best places you could go because the equipment was good and the surgeons were very experienced. They'd managed many different mass casualty patients with catastrophic injuries. They were extremely competent and very good at doing what they had to do to bring a patient through. I did not lack for anything in my experience as a surgical resident either at Da Nang or on board the *Sanctuary*.

Having spent your 6 weeks out there, what kind of feelings did you have when you were ready to leave?

It was mixed emotions. I knew that it was going to take time to sort out my feelings and emotions because I had seen so many young Americans and Vietnamese civilians with massive injuries that it became mind-numbing after a while. It was a daily routine seeing people with amputated extremities, with massive injuries to the chest or abdomen or the head and neck. If you dwell on those patients and those injuries, I think it can be very demoralizing or very discouraging. I knew as I was getting ready to leave that I was a different person than who I was when I had arrived 3 months before, not just surgically speaking, but as a human being. I was a different person because the experience was overwhelming in the amount of suffering, the amount of lives lost, and the amount of people who were leaving Vietnam as patients.

One of the complaints I have heard from surgeons who served in Vietnam, particularly aboard *Repose* and *Sanctuary*, was that they were not able to follow the progress of their patients and see the results of their work. And they found it, although not demoralizing, less than rewarding.

Thank you for jogging my memory along those lines. I share many of those feelings with the other surgeons and young physicians that you have talked with. A few minutes ago, when I said that at the time I left Vietnam, I wasn't sure how I felt about some things. I knew it was going to take time to sort it out and try to put it into perspective because it was too much to

absorb in that short period of time. One of the feelings was exactly what you just said--wondering what happened to so many of them. When you're dealing with those kinds of injuries, you have a need to know that a few of them have done alright because you know that many of them don't do alright. You know that some of them die. You see that happen sometimes on the operating table. You just have this need to know that some of them recovered from those wounds because of what doctors, nurses, corpsmen, and everyone else was able to do for them there.

You say that you saw many patients that you couldn't do anything with; that must of been a terrible experience to have to deal with knowing that you've done your best. I've spoken to corpsmen who served in Vietnam who said they often felt guilty when they lost a patient. Did you ever feel that?

There may have been a few specific cases where I felt some of that, but in general I did not feel guilt because I was a little older. Although that was my first exposure to so many surgically injured people, for 3 years previously as a resident at Philadelphia Naval Hospital I'd seen a certain amount of trauma and of course other illnesses, cancer and so forth, in young patients, dependents, and retirees. I was not as overwhelmed as a young corpsmen who was seeing some of those things for the first time in their lives and didn't have that background or experience to fall back on.

Let me expand a little bit about follow-up on patients and about feeling guilty occasionally. We would operate hour after hour, one patient after another and they would become sort of a blur over a period of 36 or 48 or 72 hours. On one occasion, I remember while I was at Da Nang I got a letter back from a surgeon in Japan, probably Yokosuka though I can't remember specifically. In the letter, basically what he said to me "I received your patient so and so on such and such a day. He was not doing well and I had to open his abdomen and I found a lap sponge inside." He didn't say otherwise he's doing well. He just let me know that I had operated and had left a sponge in. It gave me a bad, negative feeling, of course. I had done something that was not right. Of course, I shared responsibility with other people in the operating room. We had nurses there who were doing sponge counts also and I'm sure I had an accurate count in that case or we wouldn't have closed the abdomen.

You got back and where did you go from there?

I returned to my residency training at Philadelphia Naval Hospital.

Did you encounter a kind of reverse counter culture?

It wasn't culture shock because I still had fresh memories of Philadelphia Naval Hospital and it was comfortable to be back there. There were several interesting things that happened. For one, I occasionally saw some patients back in Philadelphia that I had operated on in Vietnam. That was a rewarding experience to see them doing well and recovering. In Vietnam aboard the *Sanctuary* and at Da Nang I would sometimes make rounds in the morning and then go to the operating room and operate all day. When I got back to intensive care or the recovery ward or the other wards in the evening, many of the patients who had been there in the morning were now gone, evacuated either to Japan or the Philippines or back to the United States. There would be new patients in those beds. I had very little continuity of patient care.

Because of the rapid evacuation system, very few of the patients we operated on returned to duty because their injuries were serious and they eventually came back to the United States for rehabilitation or plastic surgery or orthopedic prosthetic fittings those sorts of things. With many of the people I operated on, I really didn't know what the outcome was or how they eventually did. When I came back to Philadelphia Naval Hospital and saw some of them, it was good to see them now smiling and recovering from their wounds; their incisions healed and getting ready to either return to duty or be discharged from the service if they had an amputation or some other serious injury.

If I may continue just for a minute talking about culture shock I returned to Philadelphia Naval Hospital for a very short time, and then as another part of my training and surgery I was sent to the Childrens' Hospital of Philadelphia for 3 months of pediatrics surgical training. At the time I completed that training, in a period of 9 months, I had been from Philadelphia Naval Hospital, to Da Nang Naval Hospital, to the USS *Sanctuary*, back to Philadelphia Naval Hospital, and then to Childrens' Hospital of Philadelphia. Patients started becoming a little confused in my mind as to where I had seen them and taken care of them.

How long were you at the Naval Hospital following your return from Vietnam before you went to Childrens' to do your pediatric work?

I got back in late September and in early October went to Childrens' Hospital. I then came back to the Navy hospital and completed my third year of training.

You say that you completed your year of training. What could you have learned after what you had already seen in the way of trauma surgery in Vietnam? It seems like you could have done some training yourself at that point.

As a matter of fact, it was a bit of an awkward position. You're absolutely right. Occasionally a trauma patient arrived at Philadelphia Naval Hospital, but as in most military hospitals today, we didn't get very much trauma. When I returned as a third-year resident, I was working with and for chief residents, who did not have the experience I had had. It's my hope that I didn't come back with a "know it all" attitude. There was no question in anyone's mind that the resident on the staff with the most experience in trauma was myself.

Where was your next assignment?

I completed my training at Philadelphia Naval Hospital and in the summer of 1970 got my next assignment as ship's surgeon aboard the aircraft carrier *America*. I joined it in Vietnam.

You were a general surgeon at that point, not a flight surgeon?

Correct.

What kind of medicine did you practice?

We were far offshore, moving around and we weren't a casualty receiving ship. We never received trauma patients. I was the ship's surgeon for approximately 5,000 people for a year. The things I took care of were very routine-- hernias, occasional appendicitis, occasionally gall bladder disease. There was some shipboard trauma that was interesting. There was one episode

that has always stayed clear in my mind because it was a rather dramatic case. There was an A-6 on the flight deck with its canopy open. A mechanic was leaning over the canopy rail working inside the cockpit on something, when it started to rain. Another aircraft mechanic on the flight deck, on the opposite side didn't see his buddy leaning over the canopy rail. He actuated a canopy closure lever on the side of the aircraft so rain wouldn't enter the cockpit and short out any of the electrical systems. Suddenly the canopy began to squeeze the rib cage bilaterally on the mechanic who was leaning over working inside. Before he lost consciousness, he was able to hit the canopy retraction lever inside the cockpit and the canopy retracted. He was in pain and he tumbled off the canopy rail and onto the flight deck, a drop of 6 or 7 feet. As he lay there, several people could see that he was hurt and suggested that he go to sick bay and get treatment. He walked down several decks to sick bay and came in where I saw him. It became obvious in just a short time that he was bleeding internally and getting shocky. We activated the ship's walking blood bank system and opened the OR. We opened his abdomen and found a lacerated liver. We gave him transfusions and controlled the bleeding. We closed him and he did just fine. It was quite an unusual injury and the amusing thing, in retrospect since he did well, was the fact that with a bleeding liver he walked down the sick bay; no one carried him down on a stretcher.

How long were you there on the *America*?

The ship came back just a few days before Christmas in 1970. My family, who had been living in our home state of Ohio while I was out aboard the ship, came to Norfolk at Christmas time. The weather was miserable when the ship came in. It was pouring rain and there were thousands of people on the pier to greet us on our return from Vietnam. There they were, standing in the rain, chilled but happy to welcome us back.

Were you back now for good at that point?

I was back from Vietnam for good. The ship went into the yard for a short overhaul period at Portsmouth Naval Shipyard and that was during the winter of 1971. I lived on board during that time even though for many days there would be no power in the room where I lived and no heat. We got through a period of dust, dirt and overhaul and about April or May of 1971 the ship went to the Mediterranean. We departed from Norfolk going to the Sixth Fleet in the Mediterranean. In September of '71, I returned from that cruise.

It was during that cruise that my ideas solidified about going back to a surgical training program as a teacher. Ordinarily, when a military surgeon finishes his training, ideally he likes to be on his own at a community type hospital or a smaller place for a while to build up his experience and get a lot of cases. Because I had entered medical school older, I felt that I didn't have the luxury of spending a few years at a smaller place like Great Lakes, Camp Lejeune, or Camp Pendleton. I had enjoyed the experience of teaching as a surgical resident. I enjoyed working with junior residents, interns, and students and knew I wanted to get back into that. It was during that cruise to the Mediterranean in '71, that I wrote to CAPT Custis at Bethesda Naval Hospital asking his opinion. He encouraged me to come back to Bethesda which I did.

I arrived there in mid-September 1971 and quickly got into the routine at Bethesda of being a junior staff surgeon. We were organized into two teams--a blue team and a gold team. I was the junior surgeon on one of the teams. Over a period of years, I became the senior surgeon

and the leader of the gold team. I have wonderful memories of the patients, staff, residents, interns, and of the medical students who came through that institution from 1971 until 1980 when I left.

Did you develop a close working relationship with Dr. Custis?

He was the commanding officer of the hospital when I came back as the fresh person on the block. We were happy to see each other. He had been my chief and I looked up to him and I took his advice. I reported in and he said, "Before you start doing your surgery, I'd like you to do a little project for me. I would like you to survey the hospital. I'd like you to walk through and talk with people. Come back and give me your thoughts about how this hospital runs. Are departments getting the resources they need?" I was pleased to have that assignment as it helped me learn much about Bethesda Naval Hospital in a short period of time.

It must have been a very pleasant experience to be among old friends.

Yes. I met many new people too and I enjoyed their company and their experience. There were surgeons there who had trained both in the military and in civilian life. I enjoyed being with people who had trained at the Mayo clinic and the University of Michigan and other institutions that had different ideas or different ways of looking at things.

Did you feel more comfortable at Philadelphia than at Bethesda?

No, I felt more comfortable at Philadelphia only until I had been at Bethesda a few years. I had what you might call a love/hate relationship, although the hate word is too strong with Bethesda. I thought Bethesda was a place that received preferential treatment and got more resources and publicity than other hospitals in the Navy. It seemed to me that Bethesda had extra things on the shelf or in stock that we couldn't even get in Philadelphia. I know I'm exaggerating but hope people who hear of this in the future, will take it in a light-hearted way. I was a little resentful when I first came to Bethesda about the fact that it was special or it was the flagship. However, as I spent those 9 years there as a surgeon, I came to love it like I did Philadelphia. It was a wonderful place--good people--and I could understand that it was different and it was special because of its nearness to the Chief of Naval Operations, the Surgeon General, and to patients who were leaders in our nation and who came there to be cared for.

Did you ever have an opportunity to do surgery on any of these people?

I did and met many well-known people and government leaders. By and large those experiences were positive and I gained increased respect for the responsibilities and stresses they faced.

How long were you at Bethesda?

Until the fall of 1980 when I went to San Diego Naval Hospital as the Chief of Surgery there. That was also a fine experience. When I got orders to San Diego in 1980, I really thought long and hard about it and discussed it with my wife in great detail and I almost retired at that time. I know this sounds amusing but I thought that although I had been to Vietnam, had served

in Hawaii as a line officer, and had a lot of time in the Pacific, I had never actually been a west coast sailor. I had never been stationed in California. I thought if I went to Southern California, I was going to have to buy beads and sandals. Needless to say, retiring then would have been one of the biggest mistakes of my life. My wife and I went to San Diego and it was a wonderful experience.

That hospital had a different personality than Bethesda or Philadelphia. There was a different ambiance. There was a more relaxed atmosphere although they saw more patients than Bethesda or Philadelphia. And there was something else. There was something about California in 1980. It was not as crowded as it is today in 1991. People were more relaxed and enjoyed the outdoors. The weather was more dependable. You could plan a picnic 7 months from now and usually you could count on it being a good day. But, it's more than that. It's always the people, not just the environment; people were friendly. It was the different lifestyle that my wife and I really enjoyed. The work as a surgeon was harder because in addition to operating, I now was starting to assume responsibilities such as getting the resources for all the other doctors in the department and coordinating with all other departments. That meant taking care of the problems that arise between anesthesia and surgery or between the nursing service and surgery-- those sorts of things.

But eventually you came back east.

I didn't come back immediately from San Diego. I left there and reported as the executive officer, Naval Hospital Oakland from 1984 until the fall of 1985. That was a good experience also. During the 4 years at San Diego and almost a year and a half at Oakland, I kept getting further and further away from the operating room. It was a progression. The Navy reorganized in 1982 and, in addition to being the Chairman of Surgery and the Program Director of General Surgery, I acquired the title of Director of Surgical Services. Eventually, I became the executive officer at Oakland. I was working more and more with resources, facilities, administration, and malpractice concerns. Quality assurance was coming into the picture in a more formal way. Although there were great rewards and satisfactions in those things, my heart was still in clinical surgery--in the operating room. Because I had started out a little older than my colleagues, I hadn't had as many years in the operating room as people my age. Those nearly 6 years in the line were wonderful, I wouldn't trade them for anything, but during those 6 years, people my age had been in the operating room and they were getting experience. There came a time in 1985 to make a decision. Some of the basis for that decision had to do with the dissatisfaction and unrest going on in Navy medicine. I turned in a letter to retire in 1985. My goal was to get back into clinical medicine. It was at that time that the Chairman of Surgery at the Uniformed Services University, a colleague and friend, brought up the possibility of my joining the surgery department at the school. Initially I had the impression this was going to be as a civilian, but Dr. Rich, the Chairman, said, "You know we really need people in uniform to be role models for our students. Would you consider withdrawing your letter and coming back in uniform?" That was easily answered. I was always proud of the uniform and I was pleased to find a way to stay in it and get back into teaching and back into the OR. Of course, I said yes, and some very fine people--[Vice] Admiral [Lewis] Seaton and the President and Dean of the University, Dean [Jay] Sanford; and the Chairman of the Department, Dr. Norman Rich--all worked to help make that happen.

I came back in the fall of 1985 as Professor of clinical Surgery at the Uniformed Services University. That too was one of the outstanding periods in my medical career in the Navy. It was a pleasure to back off somewhat from acquiring resources and dealing with the other administrative problems that I had just mentioned to you and to be giving lectures on mass casualties or triage and going to the laboratory with the students and operating at Bethesda and Walter Reed. It was a wonderful year or so that I had. Occasionally, one of my leaders would bring up the subject of taking on some other responsibility and leaving the school. I appreciated their talking with me that way, but in general, my choice was to remain teaching at the school rather than leave. However, one day in the fall of 1986 a phone call came in from a spokesman for Admiral Seaton.

Who was that?

It was Admiral [RADM] Paul Caudill [Deputy Surgeon General]. They were looking for a commanding officer of the medical treatment facility of the USNS Mercy. Would I be interested in being considered as one of the candidates? I don't remember exactly what I said over the phone but I know very well what my reaction was. Immediately I could imagine the possibilities and what could be achieved on a humanitarian training mission of the finest hospital ship that had ever been put together in the history of the U.S. Navy. There were many things that just instantly passed through my mind. I thought, I could be involved on a hospital ship again after about 18 years. I was told that it was going to be a tri-service crew and here I was working at the University with tri-service faculty. I felt comfortable with that. I liked working with Army and Air Force as well as Navy personnel. There was also something else. My wife, who is a nurse, and I had thought of the possibility of doing some sort of missionary work. This tied right in with the humanitarian training mission. All these things excited me. I think what I said to Admiral Caudill on the phone was something like, "Yes, I'd be interested but I would like to discuss this with my wife and I'll get back to you," trying to keep the excitement out of my voice. In short order, I went home. I didn't have to convince my wife, she was excited for me over the prospect that I might be the one that would be given this assignment. I called ADM Caudill back and told him to let ADM Seaton know I was very much interested. Over a period of weeks and following interviews, that gradually came to happen.

Once you agreed to take on the new assignment, what type of preparation did you go through?

It all happened very quickly. I want to correct one perception. You know they asked if I would like to be considered to be a candidate and I jumped on it. There was a screening process and several people were interested in the assignment, people who had worked very hard and had made many contributions to that the ship. One name that comes to mind is CAPT Alice Martinson, commanding officer of the Oakland Naval Hospital, an orthopedic surgeon. She and her staff at Oakland had done much work in preparing for a future mission of that ship. They had written protocols and doctrines and ways to test the ship. What I'm saying is there were many people who were interested and for one reason or another I was the fortunate one who got to do it.

How did I prepare? By quickly getting involved in the project. The ship was still under

construction at National Steel and Shipbuilding in San Diego. Within a few weeks Mercy was going to be christened. And within a few days of being named, I, as the prospective commanding officer of the medical treatment facility, journeyed out to see the ship for the first time. Although, I had read about what was going on over the years--how they were building it, what they were spending, what was being done--I couldn't believe it until I walked on board and saw this ship over three football fields in length. The work that had been done, the design that had gone into the patient flow, the storerooms, the operating rooms, the triage area; I can still get excited and enthusiastic about telling the story. It was nearly overwhelming.

I was soon living in a BOQ in San Diego because we didn't have living quarters on the ship. There was no heat, no food service or anything like hotel services. Quickly, I got involved in problems and phases of construction and making it ready for the cruise. Many people were working very hard. CDR Jim Hanrahan was the Medical Service Corps officer in charge of the cadre crew, a group of about 40 people who were overseeing the construction, taking care of discrepancies, looking at deficiencies, and ordering supplies. It was a very large task being done by very few people who were working long hours--7 days a week. I joined their group as a late comer and tried to earn my spurs as a full-fledged member of that crew. My memory is that there were many problems and many meetings. There were conflicts between the medical department, the Navy line, and National Steel and Shipbuilding over how to get things done and how to get the ship ready in time. From reading the media reporting at that time, President Reagan, through an agreement with President [Corazon] Aquino and the Philippine government, had agreed to send the ship to Philippines and to that part of the world in general as part of an aid package, a training mission, and a humanitarian gesture to people who needed medical treatment. But it had to be done before the typhoon season and it had to be done in a timely manner in order to have the impact and effect on morale and to help stabilize the Aquino government. I'm talking terms of November and December of 1986 that we were completing the construction, doing the training, and getting the supplies on board. We had a target date for sailing the end of February 1987. Everything, therefore, was compressed.

What was crossing the Pacific like?

We departed San Diego on 27 February 1987 with a crew of about 625 hospital personnel and 70 civilian Military Sealift Command crew of the ship--the master, engineers, navigators, radiomen, and so forth. For many of the people of the 625 crew-members of the hospital, it was their first time at sea and we did hit some bad weather. The ship initially did not have good riding characteristics. The engineers had a hard time balancing ballast water in different compartments. Part of the time we would be steaming at a list of four or five or six degrees. That may not sound like much to you but if you're living 24 hours a day eating, sleeping, and walking down a passageway on a list, it's unpleasant. You don't like it and it adds to the bad weather, the ship yawing, and being moved by the waves. We had a lot of seasick people on our "shakedown" cruise. The engineers had to learn how to place that ballast water and get it just right so we would ride level. It didn't take too long for people to get their sea legs. By the time we reached Guam, which was about 11 or 12 days, most people were comfortable with the ship as far as seaworthiness was concerned.

Compared to the *Sanctuary*, you are talking about a flea versus an elephant.
That is an exaggeration but you're right.

Compared to the gleaming white-hulled *Sanctuary*, the *Mercy* and *Comfort* as converted supertankers are far from pretty as far as marine architecture is concerned. But beauty aside, did you find the *Mercy* well designed and able to carry out its mission?

Going back to your initial opening comment, the configuration of the converted tanker to a hospital ship is not beautiful Naval architecture per se. You know you're talking to someone who served on the battleship *Wisconsin* and aircraft carriers and destroyers. Knowing what those ships can do, they were always beautiful to me. With all the criticisms I heard, I would say that much of the design was excellent. People did good work on planning how patients and supplies flowed through the system in a way that they didn't interfere with each other. Sometimes the homework was done and sometimes it wasn't because we were under a deadline and there was a lot of pressure to finish the ship ahead of the original schedule. As the ship was being built, an MSC officer sat down and added up the cubic feet that would be required to store the supplies on board. Then, he looked at how much storage space there was. They did not match. There was not enough room to put all of the 300 tons and 13,000 line items on board.

That's where the barn came in?

That's where the "barn" came from, the two warehouses that were added. As long as anyone is interested in the history of that ship, they have to know that a MSC officer figured out that we needed that storage on the after end of the ship. What could have been different in the design? This might be hard to believe and I don't know if anyone ever told you this or if you ever saw it, but when those ships were built there was one space up forward of triage that you had to enter through a vertical ladder in a shaft that went down at least 40 or 50 feet. When you got to the bottom of this vertical shaft, it opened into space where you could have put several two- or three-story houses side by side. It was a void or an empty space. I thought "They wouldn't have needed those warehouses topside if they had been able to design a way to get supplies down into this space." That's one aspect about the design I've always wondered about.

Another criticism I think you're familiar with is patient access to the ship. It's extremely difficult. You can get aboard by helicopter and we did have a port access door which was 20 feet above the water line. You can imagine small ships or amphibious craft coming out to discharge patients from the water to the hospital ship. That 20-foot height of the port access door wasn't appropriate. There had to be modifications later and a starboard access door was put in after I left the ship. But, I understand that there were even problems with that if the seas were rough.

Well, we've certainly heard from the people who have served on it from the Gulf and that's one of the major problems that has yet to be solved. The so-called Doppler actuated patient lift system doesn't work and they don't use it. They're afraid they'll injure or even kill patients with it. And so they rigged a float which they moor alongside. But in rough weather it gets beaten to pieces.

That's interesting. As you know, in 1987 during our humanitarian training mission, our patients came aboard in small boats. They stepped onto a float and then climbed an

accommodation ladder positioned on the float and attached to the side of the ship. Although that was somewhat awkward and makeshift, it worked and I'm happy to tell you that we didn't have any patients fall off the float, or the accommodation ladder, or even get a fracture or a sprained ankle. I can't say that for the boat crew. They did have some sprains and bruises from their work.

It seems the most reliable way to get patients aboard in decent weather is by helicopter even though that's an expensive way to do it.

There is something about that I would like to tell you. Early on in the humanitarian training mission a helicopter and crew attached to the ship was operating ashore out of Cubi Point and they had an aircraft accident. Several members of the crew were killed and the aircraft was lost. From then on, the decision was clear cut. We didn't move any patients by helicopter, even though we moved our staff ashore and back and forth and brought dignitaries and visiting officials aboard that way. But that was it.

Didn't they hit some wires or something?

Yes. They were north of Subic Bay on a flight and I believe they hit some guy wires on a radio tower.

Your first stop was in the Philippines.

That's correct. We visited six ports in the Philippines in addition to Subic Bay. We went to places like Davao and Zamboanga and had a remarkable experience over a period of about 3 months. People from our government had asked the Philippine government where they wanted us to visit and what patients they wished us to see. One of the very fine things about that mission was that there had been very good coordination with Philippine government healthcare providers. The initial triage for patients was done by them so that we as visitors couldn't be criticized for showing favoritism to any one group or patient. Several days before the ship would arrive at a port, we would send in an advanced party which would include a physician, a public affairs officer, and someone who was familiar with preventive medicine. A group of six to ten people met the local leaders, set up where the site was going to be, and arranged transportation for the clinics. Then, approximately 4 or 5 hours prior to the ship arriving at its offshore anchorage near where the clinic was going to be, the ship's helicopter would fly ashore with some supplies, equipment, and people. Work then began setting up the clinics. Sometimes we had to put in our own lighting system, and bring our own power plants; we always brought our own water. The ship would anchor and the rest of the staff would go ashore, both by helicopter and in small boats. It took anywhere from 10 to 12 hours to set up the clinics. As you know, we had clinics in general surgery, internal medicine, preventive medicine, OB/GYN, dentistry, pediatrics, EENT, orthopedics, eye, dermatology. We would see patients referred to us by the local healthcare authorities. We would work from early in the morning until close to dark. Then we would take our staff back to the ship. We brought patients back to the ship whom we had seen in the clinics who couldn't be taken care of ashore. They might need an operation on board or a diagnostic study that would have to be done on board. We stayed at any given port 7 to 10 days. When clinics were through with their 7 or 10 days work, we would break them down. It took approximately 8 hours to tear clinics down and transport supplies, equipment, and people back to

the ship. The ship would move on to the next port and we would repeat the process. Over a period of 3 months, the crew became very efficient, acclimated to the tropics, and able to take care of many patients. In fact, in the Philippines and throughout the southwest Pacific, we saw over 62,000 patients, took over 10,000 X-rays, did over 24,000 laboratory procedures, and completed over 2,000 operations. Over 800 of those were major operations. We also did thousands of immunizations and conducted training for the local hospital people.

Did the tri-service medical personnel work well together?

Yes they did. It was a relationship in which the Army, Navy, and Air Force took the best from each other and combined it into one protocol or way of doing things. It wasn't one plus one equals two. There was a synergism by bringing the three services together. The Public Health Service also had three people on board.

Although the ship was designed as a trauma center, you didn't use it that way. Coincidentally, that's the way it was used in the Gulf War. There it was used the same way as a community hospital.

I think it was demonstrated that it could be used that way effectively even though it wasn't designed to be. If it had been intended to be used on an out-patient basis, they might have made it easier to get on board. And there might have been a different arrangement of the spaces. I think the ship has been effectively used that way because people are adaptable. They're very flexible and innovative. You put a group of Navy medicine people into a given situation, challenge them with some tough problem, and they'll figure out a way to do it.

I know that during the Gulf War those hospital ships demonstrated just how effective Navy medicine could be in a crunch. They did wonderful things even though they weren't used as trauma centers. Certainly that's the way it looked from the BUMED side of things.

I'm glad to hear that and I think people need to hear it in the future because I know you're right. I saw the same thing in other places and I'll give a little different perspective. We both know that from the very beginning both hospital ships were controversial. There are very articulate communities in the Navy that are looking for resources. You can look at the aviation, submarine, and surface warfare communities. All of them need more resources. They can show you what they could do with more amphibious ships or whatever. The Marine Corps needs more money. So, when DOD or the Navy invested the 500 million dollars to convert these two tankers hulls into hospital ships, there were many dedicated, patriotic line officers who looked at that 500 million dollars and felt in their own hearts that it could have been used a better way. They resisted it. It was hard for them to see that money going for those ships when they couldn't envision a use for hospital ships. You can really get philosophical about it when you think that the average young line officer doesn't have a lot of health problems. It's pretty difficult for them to imagine needing something like a hospital ship and then investing that much money into something that might end up tied to a pier. That's one reason why it was controversial.

Where did Dr. [William] Mayer fit into all of this?

As the Assistant Secretary of Defense for Health Affairs, he was very supportive of the ship and the mission. Anytime his office was involved or had anything to do with getting funds or making the ship better, or publicizing them, they worked to do it. I have always had the good impression they were strong supporters of what was done and what was accomplished.

How did the line support the ships once the Gulf War broke out?

My perspective was from the Atlantic fleet where I was serving on the staffs of both ADM [Powell] Carter and ADM [Leon] Edney. ADM Edney was CINCLANT and SACLANT and I can tell you he was in favor of the *Comfort* being used in Desert Storm and being used for humanitarian reasons. He was a line officer who recognized the value those ships had to our nation. In the case of Desert Storm, the line, including ADM Edney, had some different ideas about when the *Comfort* should go and how many people should be on it and how they should get there. There were differences of opinion about how it was to be implemented. The day the ship arrived in Norfolk from Baltimore on its way to the Gulf, ADM Edney was on board. I was there with him when he saw those gleaming decks, wide spaces, the ORs, and all that equipment, and he was enthusiastic. He saw what the potential value of that ship was. We were all pleased with the rapid mobilization of the ship as called for in the original plans.

I think the fact the ships were ready to go in so short a time really surprised everyone.

Remember, the ships were supposed go from reduced operating status to full operating status in 5 days and Navy medicine did it with the military sealift command.

I think it was a nice positive boost for an organization that had taken so many hits in the last few years. Whenever there was a whipping, BUMED got it. It was very gratifying to be able to sit back and say, "Look at that. We do have a useful function. We do have a purpose. The Medical Department is not obsolete."

I agree with you and want to expand on what you said about Navy medicine taking some hits. I know that anybody who reads this will realize, if they look at newspapers and read books, that medicine in general in our nation has been under a lot of criticism because it's an expensive profession. There have been problems with quality throughout medicine and people are just looking with a much more critical eye at what healthcare professionals do, how they do it, what their outcome and results are. We were just part of that whole picture. We in Navy medicine were and are being looked at very critically. We are trying to make it more economical while trying to maintain high quality.

Did you get to do any surgery while you were out on the *Mercy*?

Yes, but not a lot. I can't tell you that I was operating every day, but there were a number of cases I participated in. I had a habit of walking into the operating rooms each day. I recall seeing a young OB/GYN surgeon operating on a large ovarian tumor. She was having difficulty with exposure because the patient was rather small and the tumor rather large. That was the first case I scrubbed on. I felt there was a need to be involved. Sometimes I would scrub on hernias and thyroids and I was involved in a dozen or so cases.

How did the voyage end?

I recall mixed emotions. First of all, there was the feeling of having participated in something that I sincerely believed was very worthwhile. So much had been done and everything coordinated well. The crew of the *Mercy* became extremely efficient and there was great satisfaction and reward in that aspect. During the final weeks of that humanitarian training mission, I received a message from BUMED that my mother was seriously ill. I left the ship for a short time and came back to the U.S. to be with my family. I did not make it in time; she died before I got to Ohio where she lived. I was then promoted to flag rank at the end of the cruise on 1 July 1987.

And so it was a very intense, emotional period in my life. I had just completed what was regarded as a very worthwhile mission, my mother died while I was away, and then I was honored by promotion to flag rank. All of those things happened in a short period of time.

Even after the end of the mission we were very busy because we had to summarize our statistical accomplishments and compile a list of lessons learned. We had to make recommendations how the ship might better be used in the future and to speculate about what changes might have to be made for the ship to be used in a wartime role.

Was there another assignment in the offing when you got back and made flag rank?

Not right away. We came back by way of Hawaii and spent the Fourth of July there. Of course there were the traditional holiday celebrations and welcomes. Some of the crews' families flew out from CONUS to be in Honolulu when the ship arrived. Those are pleasant memories. We left there and came back to the a pier in Alameda for the *Mercy*'s homecoming and that was a joyful occasion. I'll never forget steaming under the Golden Gate Bridge. Flowers were dropped on the ship. Fire boats were there spraying water in the air. We all lined the rails and seeing the country again and glad to be back. Many dignitaries were there. Dr. [C. Everett] Koop [Surgeon General of the United States] and Dr. Mayer came out and RADM Zimble was there; there were many others too numerous to name.

There is one little anecdote that someone may eventually be interested in. It was a very difficult navigational process to get under the Oakland Bay Bridge, make a turn into the Alameda Channel, and to then make another turn to get alongside a pier. The *Mercy* is about three football fields long and those were rather tight quarters. I recall that the ship came very close to a fishing pier on its port side as it was making a starboard turn to get into the pier. I vividly remember fishermen on this little pier, all relaxed holding their rods and reels, and watching this huge ship come closer and closer. It got so close that gradually a look of panic came into their eyes and suddenly they began scrambling and picking up their tackle boxes and reeling in their lines and running off that pier. Standing up on the bridge looking down, I saw all those people running for their lives. I don't know what was going through the minds of the captain and the pilot of the *Mercy*, but it had to be stark terror. Nevertheless, we had no problem. We never touched, made the turn, and came into a glorious homecoming.

Your question a few minutes ago was what was the transition to other duties after the *Mercy* returned. After the immediate period of being busy, getting the crew off the ship and writing those lessons learned and so forth, we each went our separate ways, those of us that had

been TAD on the ship. The cadre crew of 40 remained. I returned to my duties as a Professor of Clinical surgery at the Uniformed Services University. Needless to say, there were many demands for speaking engagements from military and civilian organizations. Many people were interested in hearing where there tax dollars had gone and what had been accomplished. I literally lost track of the numbers of talks and speaking engagements that followed, but they were all very rewarding because audiences were receptive.

Under the new Surgeon General, VADM James Zimble, I was given the assignment of commander of the National Capital Region headquartered at the Bethesda Naval Hospital. In November of 1987, I relieved RADM Richard Shaffer and worked there for a little over a year.

You then got a new assignment in 1987?

That's right. The Navy Medical Department was having difficulty maintaining access to care for patients. We were having problems with graduate medical education. There's always tension or pull between the fleet, the Marine Corps, and the hospital based physicians. There is a need for workers to serve people in both arenas. In the mid-1980s there had been a little more emphasis on operating forces than on the graduate medical education programs and they were suffering some. They had reached the point where the program directors were worried about the survival of the programs and their accreditation with the residency review committees. That was a major concern to the Surgeon General. In addition, we were having an increasing number of beneficiaries eligible for care in our facilities. They were getting older, there were more retirees, and their illnesses were more severe. It was a time of turmoil. Our line leadership played a much more active role than they had in the years prior to 1987.

The upshot of all this was the convening of a blue ribbon panel comprised of senior line officers, supply corps officers, and Medical Department officers, who looked at the problems and made some very aggressive recommendations about changing course. We simply had to become more responsive to our patients. As a result of this, the regions went away and my job as regional commander also went away. I then learned that my next assignment would be as the Atlantic Fleet surgeon. I went to that with enthusiasm because I was returning to the line, a place I left over 20 years before. I was going back to the ships, the aircraft, and the people I had started out with in 1955.

Did you find that you had a real advantage because of your knowledge of how that operation worked? Were you received better than your Medical Department predecessors?

Yes. I had an advantage; however, I don't know if I was received better or not because I think the senior line leadership has a warm feeling toward individual Medical Department officers. I think they like them to be members of the team, and to fit in. I think if you have worked in an engine room, in a machinery space, or have holystoned the decks of a battleship, of course you have an advantage. You know the language. You can tell sea stories along with the best of them.

What were your duties when you reported as Atlantic Fleet Surgeon?

The primary duty was to be the senior medical advisor to the commander-in-chief of the Atlantic Fleet and I'll expand on that in a minute. There are two additional duties with that

assignment--the fleet surgeon is also medical advisor to both CINCLANT and SACLANT. CINCLANTFLT is the senior Navy line officer, a four star admiral, who is in charge of the ships of the Atlantic Fleet. At the time I was there, that included about 312 ships and a large number of aircraft and men. The area of responsibility extended from Maine, down the east coast, through New York, New Jersey, past Norfolk, to Florida, and into the Gulf region. All those Navy ports and ships were under one four star admiral and I was his medical advisor. Every hospital or clinic in that region where a sailor or marine might go to be treated was of interest to him and he would turn to me if a problem arose at any of those places. I had to go out to troubleshoot problems and then carry the information back to him with a recommendation on how to deal with it.

One step up in the echelon of command, above CINCLANTFLT, was another four star admiral called CINCLANT. CINCLANT was a joint command of Army, Navy, and Air Force personnel. CINCLANT, who had CINCLANTFLT beneath him, not only had all those ships, but in addition had the Air Force Tactical Air Command out of Langley AFB, VA. He also had special forces out of Georgia and other places and Army troops of the Southern Command who were part of his command if we went to war. He might say to me, "We have an Air Force hospital at Langley and they're seeing some Navy patients. What are some of the problems there?" He could, therefore, request advice from me regarding Army and Air Force medical problems.

One step above in the echelon of command was SACLANT, Supreme Allied Commander Atlantic. CINCLANT and SACLANT were double hatted--the same person. Even so, he had two different staffs, two different offices, two different sets of responsibilities. Among SACLANT's responsibilities were the NATO nations and their medical forces. In that hat, he could turn to me as the senior medical advisor and say, "Dr. Sturtz, what do you think about medical supplies in Norway or what do you think about the preparedness of the Second Fleet to deal with cold water operations? What are the medical challenges?" Or he could say, "What about coordinating medical equipment and care with NATO?" You can see that all this is not easy for people to understand. I would like to end up by saying there was a humorous side to it all. Wearing his SACLANT hat, the admiral could ask me a question and then direct me to tell CINCLANT to do something medically. I would walk down the hall and answer the memo as the CINCLANT medical advisor. It sounds kind of ridiculous but, in fact, it did make sense. There had to be two staffs and two chains of command and we were able to work it out. As long as I remembered which hat I had on, there was no problem and I always gave myself the right answer.

Do you recall any serious problems you had to deal with in those positions?

Yes there were but at this point, I can't discuss them all because they're still classified. I have to be rather vague in some respects. I can give you some specific examples. When Hurricane Hugo hit the Dominican Republic and several islands off the coast of Florida before eventually coming ashore in Charleston, Charleston Naval Hospital participated and brought patients in from nursing homes and civilian hospitals. That was one of the times when we had to coordinate Army, Navy, and Air Force medical care. We also had to provide for evacuation of patients and get medical supplies to the Caribbean. It required around-the-clock activity for a week or 10 days or so and always there was medical involvement.

There were other episodes. The newspapers talk about the U.S. war on drugs. The Navy,

Marine Corps, and the Air Force had a large effort going on in the Caribbean during the time I was on those staffs. They were interdicting drugs by stopping ships on the high sea and were confiscating drugs. Our forces were tracking aircraft coming out of South America and approaching our country and islands in the Caribbean suspected of carrying drugs. The Medical Department was involved in case there were any casualties arising from those situations.

As far as NATO is concerned there were many interesting issues and problems we dealt with in the Medical Department. You may remember a Russian nuclear submarine sinking several hundred miles off the coast of Norway. We in the Medical Department had peripheral concerns about radiation being released to the atmosphere and the ocean. We also participated in the challenge of moving a prepositioned NATO fleet hospital to southwest Asia as a resource for operation Desert Storm.

I understand. I'll have to get you 50 years from now when everything is declassified. I surmise that you worked out of Norfolk during this period. Who did you work for?

CINCLANTFLT was a Naval Academy classmate of mine, ADM Powell Carter. There have only been two people from the class of 1955 who were promoted to four star admiral. He was one of them and I was proud to be a member of his staff and to work for a classmate. When I first got there, the additional duty assignments--CINCLANT and SACLANT--was with ADM [Frank] Kelso. I had the opportunity to serve as his doctor and as his medical advisor. When ADM Kelso was selected as CNO, he was relieved by ADM Leon "Bud" Edney. That is an interesting cycle of events because ADM Edney had been the head of that Blue Ribbon Panel which recommended numerous changes in Navy medicine.

Did you take an active role in Desert Shield/Storm while you were there?

Yes, from the time we started to mobilize medically our staff was involved. I remember getting a call from Central Command headquarters in Tampa, FL, within a few days of the beginning of Desert Shield. The person on the other end of the line was Air Force Colonel Belihar, who was General Schwarzkopf's senior medical advisor. We talked on the phone several times, shared concerns, and spoke of Army, Navy, and Air Force resources. We discussed the need for fleet hospitals and hospital ships as we got more involved. It's difficult to summarize how complex that was and how much under pressure the service medical departments were to meet the demands and needs of the Central Command in Saudi Arabia. It was fascinating. I was very proud to see how hard people worked, how cooperative they were, and how they responded. That doesn't mean everything was smooth and everybody agreed. There were honest differences of opinions about such things as how soon should the hospital ships should be there, what size crew they should have, and should the ships have all active duty or should there be reserves on board? All these things were discussed. ADM Edney was involved as CINCLANT/SACLANT and he did have knowledge of the Medical Department, its resources, and the ships by virtue of his familiarity with the Blue Ribbon Panel. He asked hard questions. There were daily briefings about how things were building up. Since I was attached to a joint command, it wasn't just the Navy buildup that I observed on the computer screen and at the briefings. It also involved all those beds the Army was moving and the air-transportable hospitals from the Air Force. On a daily basis, I had the opportunity to monitor, participate, recommend, and be involved one way or

another.

Having been skipper of a medical treatment facility on one of the hospital ships, did you offer any advice regarding USS *Comfort*?

I wish I could tell you that on day one they came and asked a lot of questions. By this time, several years had passed since the *Mercy* mission. There were new commanding officers assigned. I would like to think someone somewhere looked at those lessons we learned back in '87 and took something from it. We do build on history and tradition. Maybe we do lose track of who recommended this or that, but, yes, I feel that I did participate, in that respect.

When *Comfort* came to Norfolk, in a matter of a few hours, ADM Edney and I were on board. He wanted to see it, be reassured that the cadre crew was well trained, had equipment on board, and knew what their mission was. He wanted to be sure the cadre crew was ready to accept a large crew of physicians, nurses, and technicians and steam across the Atlantic. After he toured the ship, he came away feeling very confident that USNS *Comfort* was ready to do its mission.

How long did you serve there in Norfolk?

I served there a little over 2 years and retired from active duty on 1 March 1991. It was a wonderful day and several things made it that way. For one thing, Desert Storm came to a conclusion 2 days before I retired. Had it not been over, it would have been a little harder to leave active duty. I would have felt like something was unfinished or there was something ongoing that I wanted to be involved in. The end of the war really put some icing on the cake.

As the retirement day approached, did you have any time to reflect on your long, eventful career?

At the time, Desert Storm was still too fresh in my mind for me to have any real perspective on that aspect. But, yes, I did look back and reflect. I started thinking seriously about what impact retirement would have on my life and my family's life. I never developed a short timer's attitude. I remained busy and involved. I remember saying to myself, "Well, this is the last time I'm going to wear the white uniform." Or "This may be the last time I have on my dinner dress uniform." I started to make note of these events because I wanted to get pleasure from them. I wanted to carry away good memories. I made a conscious effort and it worked. I had a good time going through a lot of those things for the last time. By the time retirement day approached, I could look back and think, "The Navy has changed since I joined it as a midshipmen and the Medical Department has changed since I was an ensign in medical school, and most of the changes were for the better." The mind is kind and one tends to forget some of the rough edges and some of the difficult times. When I looked back at the Navy and the Medical Department and their people, I saw them better trained and better able to carry out their missions. I saw programs in place that were solid in concept and execution. I saw young physicians and medical students coming along of high caliber and I was very proud of them.

Tell me about your retirement day.

There are several things that stand out in my mind. For one thing, my staff and I wanted it

to be outside at NATO headquarters in Norfolk on 1 March. On that date it can be snowing, raining, sleeting or foggy in Norfolk. We proceeded with blind faith or dumb luck and we had a sunshiny day with blue skies and a temperature of 70 degrees. It was one of the most beautiful days you could ever see. Then there was the symbolism. Norfolk is not only the largest naval seaport, but I had made my first cruise out of there in 1952 on the battleship *Wisconsin*. My first seagoing experience had been there. I had a daughter who was born in Norfolk in 1959. To end up there with a classmate as my senior was rewarding. Obviously, I was able to have many family and friends there. It was rather easy for me to make my retirement remarks because I felt I had had a rewarding career and there was much I could look back on with pride and satisfaction.

The next morning you woke up as a civilian. How did that feel?

The memory of family and friends present at retirement, and the knowledge I had the opportunity to come back to the Uniformed Services University made it a good morning. Although I was going to be in civilian clothes as Dr. Sturtz and not Rear Admiral Sturtz, I was going to be with the Army, Navy, Air Force, and Public Health Service medical students. The future looked bright.

And you're teaching clinical surgery?

Yes.

Is it essentially the same job you had when you were in uniform?

In some respects. I don't have command responsibilities and I don't have the same kind of staff assignments of the positions I once held. However, the rewards of teaching medical students and young physicians and caring for patients are rewarding responsibilities. Those things have been part of my medical career since intern days and I still find all of them stimulating.